

STORMVAULT BIOFILTRATION (SVBF)

CONFIGURATION: TREE WELL (-TW)

MODEL: SVBF-TW 10X20

HYDRAULICS

| | |
|---|------------|
| STORM WATER QUALITY DESIGN FLOW (SQDF) | ≤ XX.X-CFS |
| STORM DRAIN DESIGN CONVEYANCE FLOW | XX.X-CFS |
| RETURN REQUENCY / PERIOD OF PEAK DESIGN CONVEYANCE FLOW | XX-YRS |

TREATMENT

| BIO SOILS FILTRATION MEDIA | PUBLIC DOMAIN BIO SOIL MEDIA* | JENSEN'S SIERRA BLEND ** |
|--|-------------------------------|--------------------------|
| BIO SOIL MEDIA UNITIZED TREATMENT FLUX RATE | 10-IN/HR | 193-IN/HR |
| HYDRAULIC SURFACE LOADING RATE (HSLR) | 0.1-GPM/FT ² | 2-GPM/FT ² |
| MODEL SVBF-TW 10X20 PEAK TREATMENT FLOW RATE | 0.045-CFS | 0.891-CFS |
| | 20-GPM | 400-GPM |

*JENSEN BIORETENTION & INFILTRATION TREE/PLANTER **STORMVAULT BIOFILTRATION** SIZED TO TREAT THE ENTIRE SQDF AT A RATE OF 10-INCHES/HR WHEN USING SPECIFIED PUBLIC DOMAIN BIO SOIL MEDIA.

JENSEN BIORETENTION & INFILTRATION TREE/PLANTER **STORMVAULT BIOFILTRATION SIZED TO TREAT THE ENTIRE SQDF AT A RATE OF 193-INCHES/HR WHEN USING JENSEN'S ENGINEERED **SIERRA BLEND** BIO SOIL MEDIA.

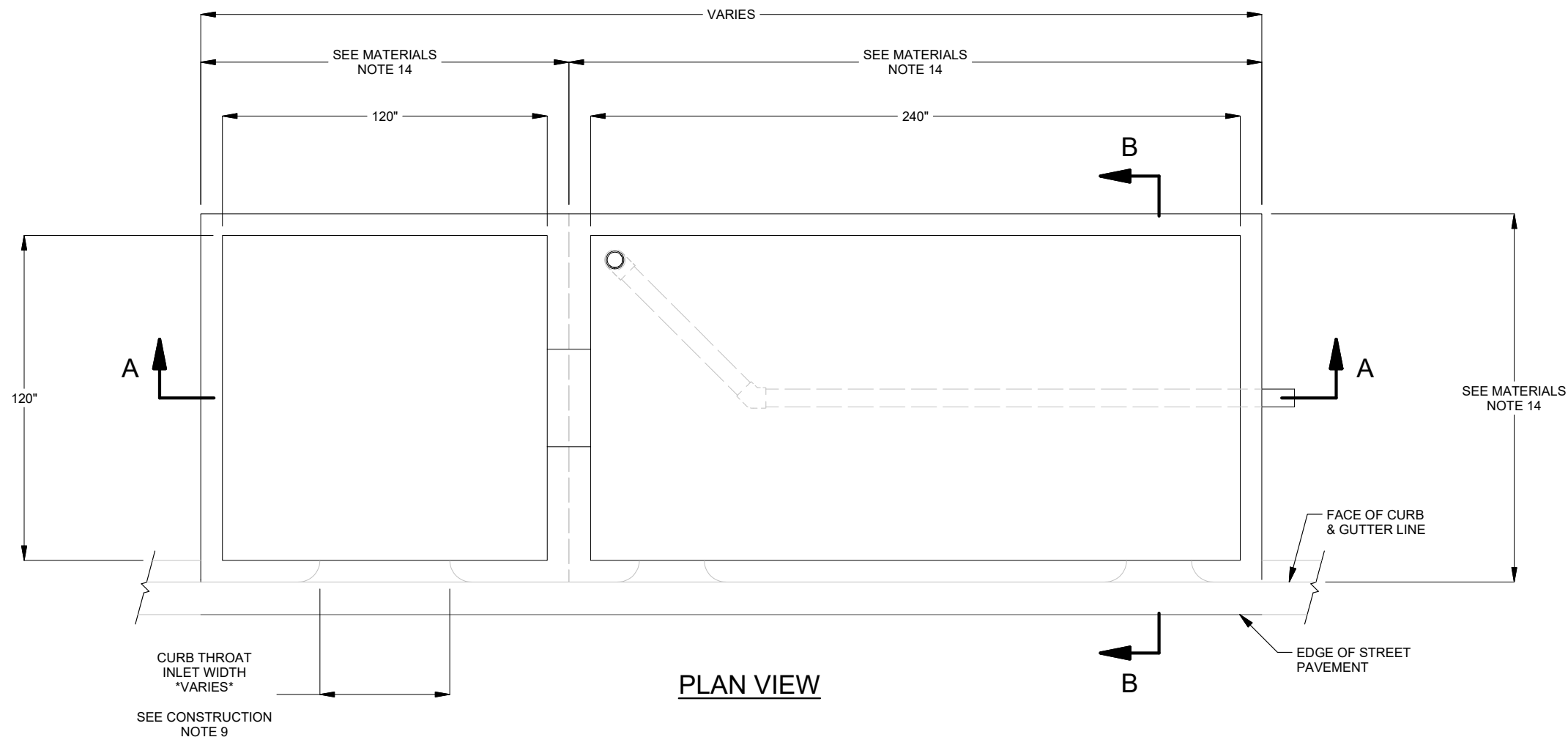
- JENSEN'S STORMVAULT BIOFILTRATION (SVBF) DESIGNED AND SIZED TO TREAT THE ENTIRE SQDF.
- CAPTURED WATER QUALITY CONSTITUENTS:
 - TOTAL SUSPENDED SOLIDS (TSS)
 - PHOSPHORUS
 - TOTAL AND DISSOLVED COPPER
 - TOTAL AND DISSOLVED ZINC
 - OIL & GREASE
 - FECAL COLIFORM

CONSTRUCTION & INSTALLATION NOTES

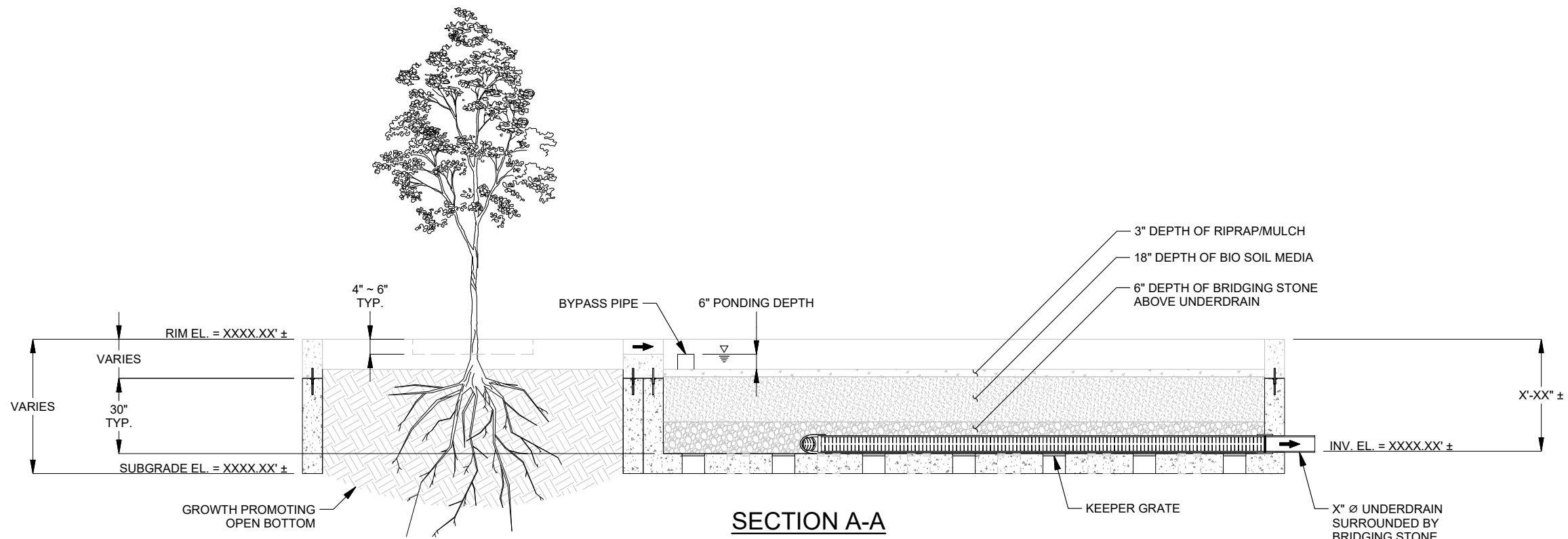
- CONTRACTOR TO VERIFY ALL DIMENSIONS AND ELEVATIONS IN FIELD PRIOR TO INSTALLATION.
- THE CONNECTION BETWEEN THE INTERNAL DRAIN PIPING OF THE SVBF SHALL BE MADE USING CONNECTORS CONFORMING TO ASTM C923, AS MADE BY KOR-N-SEAL, A-LOK, OR APPROVED EQUAL AND SHALL BE WATERTIGHT.
- CONTRACTOR MAY ALSO GROUT ALL PIPE PENETRATIONS IN PRECAST CONCRETE OPENINGS IN FIELD AS NECESSARY.
- CONTRACTOR TO PROVIDE FIELD POUR OF CURB TO THE ELEVATIONS SHOWN ON THE SITE DRAWINGS AS NECESSARY.
- THE CONNECTION BETWEEN THE STORM DRAIN LINE AND THE SVBF SHALL BE MADE USING A RESILIENT CONNECTOR CONFORMING TO ASTM C923, AS MADE BY KOR-N-SEAL, A-LOK, OR APPROVED EQUAL AND SHALL BE WATERTIGHT.
- VEGETATION, FOUNDATION, SUBGRADE, AND BACKFILL TO BE DESIGNED BY OTHERS.
- SVBF CAN READILY BE RECONFIGURED AS AN OPEN TOP SWALE SYSTEM TO RECEIVE SURFACE FLOW FROM ALL SIDES, ELIMINATING TOP SLAB AND TREE GRATE.
- SVBF MAY BE DEPLOYED WITH UNFINISHED TOP OF WALLS TO BE POURED IN FIELD ALLOWING FOR CONSTRUCTION OF CONTINUOUS STREETScape AND LANDSCAPE FEATURES.
- INLETS THROUGH CURB CAN BE LOCATED ON ANY SIDE OF THE BOX AND THEIR DIMENSIONS VARY PER DESIGN.

MATERIALS & DESIGN PARAMETERS

- ALL DIMENSIONS ARE IN DECIMAL INCHES.
- CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH $f'c = 5,000$ -psi AT 28-DAYS.
- THE PORTLAND CEMENT USED IN THE PRECAST SECTION SHALL MEET THE REQUIREMENTS OF TYPE II/V HIGH SULFATE RESISTANT CEMENT IN ACCORDANCE WITH ASTM CLASS M C-150.
- VAULT SECTIONS DESIGNED AND MANUFACTURED IN ACCORDANCE WITH ASTM C857 & C858
- ALL PRECAST CONCRETE COMPONENTS TO BE MANUFACTURED IN AN NPCA CERTIFIED PLANT.
- IF REQUIRED, JENSEN WILL FURNISH VAULT WITH FLUID-APPLIED WATERPROOFING COATING AROUND ENTIRE INSIDE SURFACE OF SVBF.
- BRIDGING STONE SHALL BE CLEAN, WASHED.
- ALL PVC PIPE SHALL CONFORM TO ASTM D 3034 (SDR-35) PIPE.
- GROUNDWATER ELEVATION IS ASSUMED TO BE BELOW THE BOTTOM OF PRECAST STRUCTURE. CONTACT JENSEN STORMWATER SYSTEMS FOR HIGH GROUNDWATER CONDITIONS.
- STANDARD CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE READILY AVAILABLE. CONTACT JENSEN STORMWATER SYSTEMS FOR CUSTOM DESIGNS, www.jensenengineeredsystems.com.
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- ALL CONCRETE COMPONENT THICKNESSES, DIMENSIONS, AND JOINT ORIENTATIONS MAY VARY ACROSS JENSEN PRECAST'S MANUFACTURING FACILITIES.



PLAN VIEW



SECTION A-A

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JENSEN STORMWATER SYSTEMS
 521 DUNN CIRCLE, SPARKS, NV 89431
www.jensenwaterresources.com
 (855) 468-5600

MODEL:
**STORMVAULT BIOFILTRATION
 TREE WELL
 MODEL: SVBF-TW 10X20**

| | | | |
|--------------|-----------------------------|-----------|------------------|
| PROJECT: | PROJECT NAME CITY, STATE | | REV: |
| PART NUMBER: | SVBF-TW 10X20 | DRAWN BY: | T. Schmaling |
| CREATED: | | MODIFIED: | 5/28/2020 |
| | | | SHEET: 1 of 2 |

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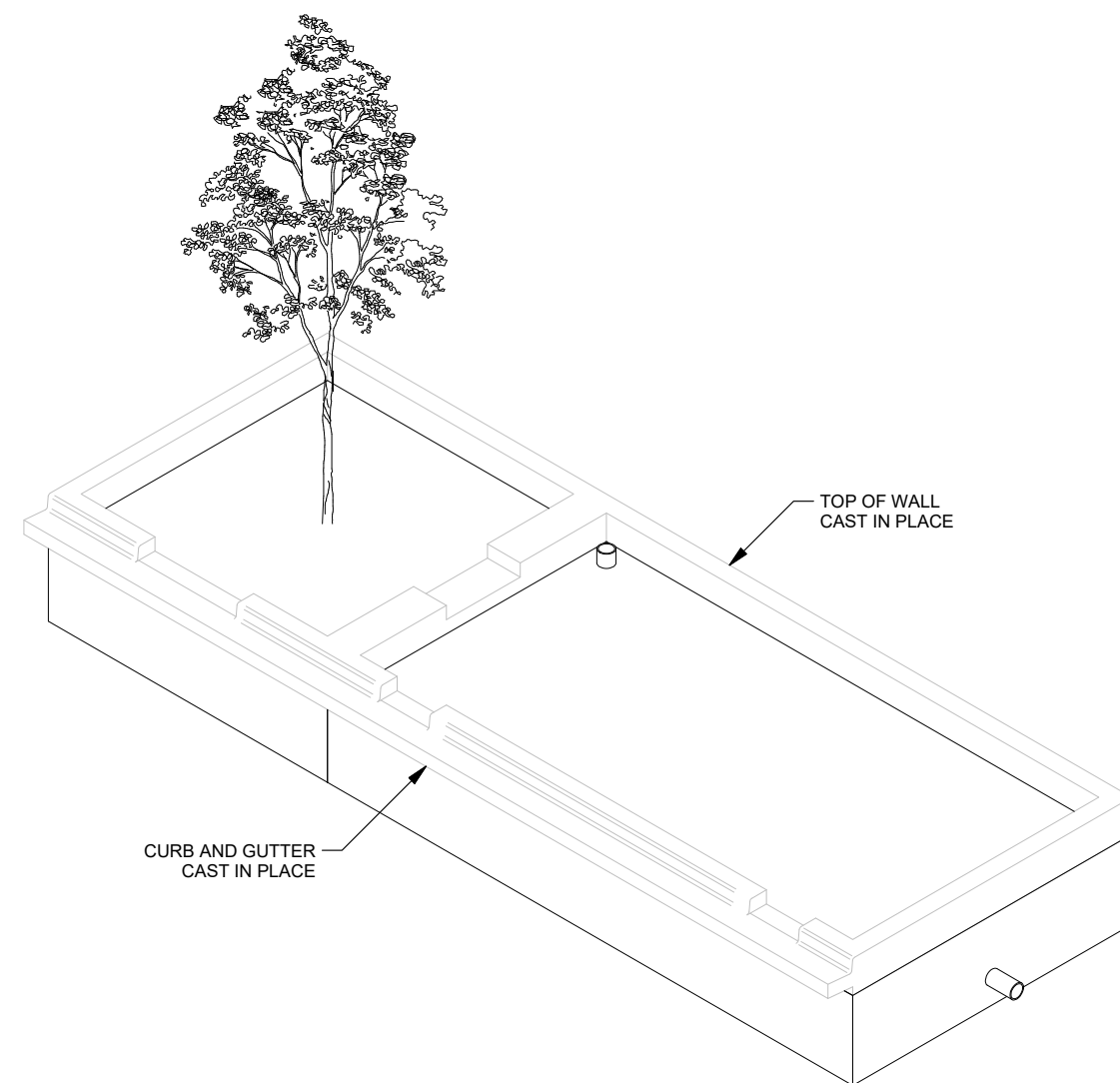
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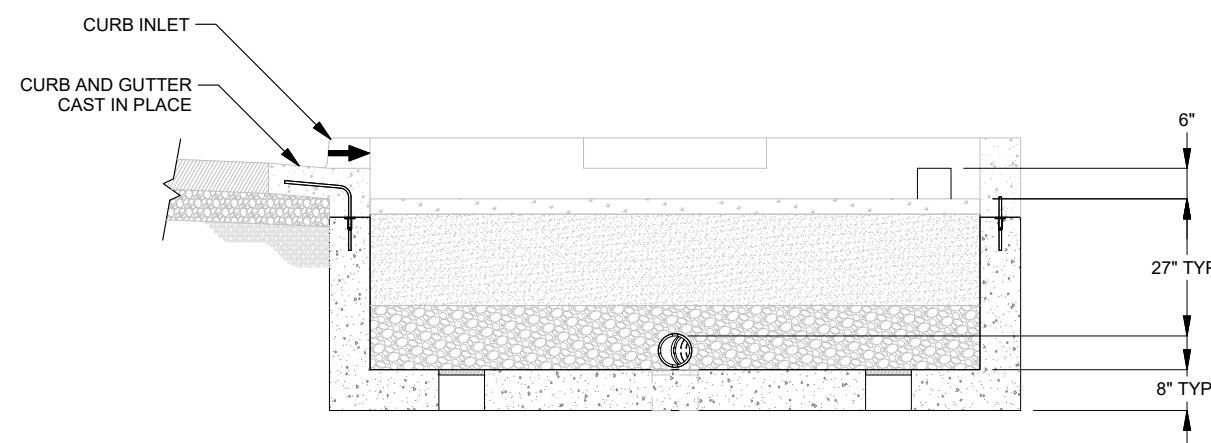
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ISOMETRIC VIEW



SECTION B-B

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| PART NUMBER: | SVBF-TW 10X20 | DRAWN BY: | T. Schmaling |
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| | | | SHEET: 2 OF 2 |